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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,905	06/04/2001	Toshio Kuroiwa	24673	2128

7590 08/29/2005

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EXAMINER

BAUM, RONALD

ART UNIT PAPER NUMBER

2136

DATE MAILED: 08/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,905

Applicant(s)

KUROIWA, TOSHIO

Examiner

Ronald Baum

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in reply to applicant's correspondence of 13 June 2005.
2. Claims 1- 3 are pending for examination.
3. Claims 1- 3 are rejected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Staley, U.S. Patent 6,073,123.

5. As per claim 1; "A master digital data creation device for supplying second digital data obtained by scrambling first digital data to a digital reproduction device having a recording medium, [Abstract, figures 1-4 and accompanying descriptions] comprising:

an encryption block generating a first control word based on

an allowable number of reproductions specified by the digital data reproduction device [i.e., copy prevention] and

applying a one-way function to the first control word a number of times corresponding to the allowable number of reproductions to generate a second control word [col. 2, lines 45-col. 9, line 6, whereas the encryption of licensing, SHD, etc., and associated parameters for controlled copying (i.e., see figure 1 and associated description) clearly encompasses the "... number of reproductions ..." and the encryption process is

Art Unit: 2136

key (i.e., inclusive of the case of using the license as the encryption key information) based and is broadly interpreted by the examiner to encompass one way functionality.];
a scrambler receiving

the second control word for scrambling the first digital data using the second control word to produce second digital data [col. 2, lines 45-col. 9, line 6, whereas the encryption of licensing, SHD, etc., and associated parameters for controlled copying such that the content encryption (i.e., scrambling) process is key (i.e., inclusive of the case of using the license as the encryption key information) based and is broadly interpreted by the examiner to encompass the “ ... to produce second digital data” .]; and
an output block outputting

the second digital data and

the first control word to the digital data reproduction device [col. 2, lines 45-col. 9, line 6, whereas the multiple use of encrypted / controlled decryption / reproduction / data utilization (i.e., software use or data) / updating and re-encryption of licensing, SHD, etc., and associated parameters for controlled copying is broadly interpreted by the examiner to encompass the “ ... outputting ... data reproduction device” .].”.

6. As per claim 2; “A digital data reproduction device [Abstract, figures 1-4 and accompanying descriptions, col. 2, lines 45-col. 9, line 6] comprising:

an acceptor accepting recording media on which first digital data and a first control word CWk are recorded,

Art Unit: 2136

said first control word being generated based on a specified allowable number k of reproductions [i.e., copy prevention],

said first digital data being generated by scrambling desired second digital data using a second control word CWo generated by applying a one-way function to the first control word CWk k times [col. 2, lines 45-col. 9, line 6, whereas the encryption of licensing, SHD, etc., and associated parameters for controlled copying (i.e., see figure 1 and associated description) clearly encompasses the “specified allowable number k of reproductions” and the encryption/decryption process is key based and is broadly interpreted by the examiner to encompass one way functionality.];

a decryption block

receiving the first control word CWk and

applying the one-way function to the first control word CWk k times

to produce the second control word CWo;

a de-scrambler receiving

the first digital data and

the second control word CWo and

de-scrambling the first digital data using the second control word CWo

to produce the second digital data [col. 2, lines 45-col. 9, line 6, whereas the encryption of licensing, SHD, etc., and associated parameters for controlled copying clearly encompasses the claimed limitations as broadly interpreted by the examiner.]; and

a reproduction unit reproducing the first digital data generated by said de-scrambler,

Art Unit: 2136

wherein, after every reproduction by said reproduction unit, said decryption block writes a third control word $CW(k-1)$ back to said recording media, said third control word $CW(k-1)$ being generated by applying the one-way function to the first control word CW_k once, and

wherein, if the first control word CW_k received from the recording media equals the second control word CW_o ,

the de-scrambling by said de-scrambler and

the reproduction by said reproduction unit are inhibited [col.

2, lines 45-col. 9, line 6, whereas the encryption of licensing, SHD, etc.,

and associated parameters for controlled copying, and whereas the process of verifying authority to copy, etc., is clearly iterative from data transfer to data transfer, clearly encompasses the claimed limitations as broadly interpreted by the examiner.].”

7. Claim 3 *additionally recites* the limitation that; “The digital data reproduction device according to claim 2,

wherein, when a desired number of reproductions, n , is received from some other reproduction device, said decryption block receives

the first control word CW_k from the recording media and,


if $k \geq n$,

applies the one-way function to the first control word CW_k ($k-n$) times to produce the third control word CW_n and

Art Unit: 2136

applies the one-way function to the first control word CW_k n times
to produce the fourth control word $CW(k-n)$; and
records the fourth control word $CW(k-n)$ on the recording media for
updating,
further comprising:
an output block outputting
the first digital data recorded on the recording media., and
the third control word CW_n obtained from the decryption block, to the
other reproduction device.”.

The teachings of Staley suggest such limitations (figures 1-4 and accompanying descriptions, col. 2, lines 45-col. 9, line 6, whereas the encryption of licensing, SHD, etc., and associated parameters for controlled copying, and whereas the process of verifying authority to copy, etc., is clearly iterative from data transfer to data transfer, clearly encompasses the claimed limitations as broadly interpreted by the examiner, and further, the copy protection/ desired number of reproductions criteria is clearly application specific to the environment (i.e., “rental” media, or signal over the air transmission/reception).).


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Art Unit: 2136

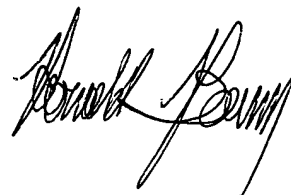
Conclusion

8. Any inquiry concerning this communication or earlier communications from examiner should be directed to Ronald Baum, whose telephone number is (571) 272-3861, and whose unofficial Fax number is (571) 273-3861. The examiner can normally be reached Monday through Thursday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh, can be reached at (571) 272-3795. The Fax number for the organization where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. For more information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ronald Baum
Patent Examiner

A handwritten signature in black ink, appearing to read "Ronald Baum", written over the printed name and title.